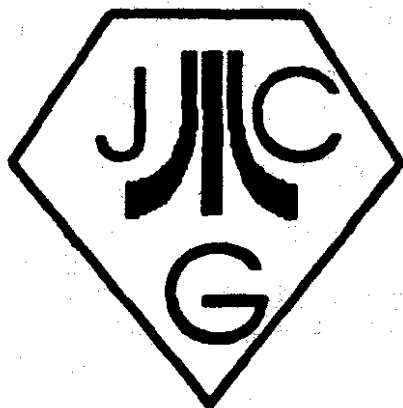


\$2.00



THE  
**JACG** NEWSLETTER

**JACG**

THE JERSEY ATARI COMPUTER GROUP

VOLUME 12 NUMBER 8

JACG BBS: (201) 690-5224

OCTOBER 1992

### FROM THE EDITOR'S DESK

It was with great sorrow that I learned of the passing this month of Stan Lowell, JACG member, friend to Atari, and Blank Page BBS SysOp. As Editor and being in charge of this front page, I wanted to write something of a memorial of Stan.

However, when I went to write it, I realized I actually knew very little about the man other than the all too few and all too brief impressions I had of him from the BBS and the JACG meetings. All I knew about Stan was that he was always ready with a smile and a nice word for everyone. Always willing to help in any way he could was the type of person I knew him as.

His BBS was always up and running when he was healthy, always providing communication for Atari users and friends all over the country. He offered his BBS for the club's use when our own BBS was experiencing problems and yet he never exploited that opportunity to advance his own BBS for his own purposes. His help was always freely given, just like his smiles, with no catches and no hidden motives. He truly was a GIVER!

As I reflected on these few facts I knew about Stan, I considered the fact that if when I pass from this mortal plane, if I could leave the impressions on someone the impressions Stan left on me, then I would consider myself a very lucky person.

Take care, Stan! We will all miss you.

### IN THIS ISSUE ...

- 3 .... 'Prez' ing Matters - E. Salvesen
- 4 .... 16-Bit Vice President's Report - J. Dean
- 10 ... 2 Bits From the 8-Bit VP - J. Hicswa
- 12 ... 8-Bit PD Librarian's Report - S. Cory
- 14 ... Utilma II Hints and Tips - D. Arlington
- 18 ... Noise From Noyes - D. Noyes

### CALENDAR OF EVENTS

**NEXT MEETING:**

**November 14th, 1992**

**10:00 AM TO NOON**

**FLEA MARKET Before Meeting**

# **DEPENDABLE PARTS INC.**

**168 Main Street  
Chatham, NJ  
07928**

**TEL.: (201) 635-5888**

**New Jersey's oldest authorized  
ATARI Service Center**

**HOURS: Monday through Friday: 9:00 am to 5:30 pm  
Saturday: 9:00 am to 3:00 pm**

**We also service T.V.'s, Microwave Ovens, Stereos,  
and Stereo Components, VCR's  
CD Players, and Monitors (RGB, CGA, EGA, VGA,  
and Super VGA).**

**Factory authorized service also for:  
SYLVANIA, MAGNAVOX (including P.C.'s),  
MITSUBISHI, and COMMODORE**

## GENERAL FEATURES

### 'PREZ'ING MATTERS

by Ed Salvesen, President, JACG

It is with sadness and regret that I inform you of the passing of a fellow JACG member last month. Our dear friend, Stan Lowell, departed this life the day before our September meeting and was laid to rest shortly thereafter.

I share the grief and loss with those who loved him and with those who called him 'friend'.

Stan. You WILL BE missed.

Now, after noting that last year's 'elections' were devoid of any real choices, other than vote or not vote, I was worried that, despite my self imposed 'lame duck' status, there weren't any new candidates to step forward. Joe Hicswa, bless him, has stepped up to the plate. I plan to second him at today's nominations. Unfortunately, this leaves a void for the 8-bit VP's spot. I hope one of you will step forward and spend a year on the Ex-Comm by becoming the new 8-bit VP. Some of our newest members are 8-bit only and have already done demos. That should be heartening. As for me, even if I chose not to occupy ANY post, I'll be President Emeritus, by default, and will remain on the Ex-Comm for the coming year where I can lend my two cents for any JACG business, if you think that helps?!?

We are rapidly running out of giveaway items for our drawings. If you own something that just gathers dust, please consider donating it toward our giveaways. Enough cooperation in this regard engenders recycling of a sort and can surprise one with the quality of some returns. I'll be contributing some nice Christmas goodies to help the next President's tenure get started.

This month, fellow member Joe

Roborecky is probably down South in Reston, Virginia, attending the W.A.A.C.E. fair. If we're lucky, Joe will favor us with some commentary, now that we're in a less sprawling ambiance. Also, if we're lucky, we may hear more from Mr. Richardson, Joe's friend and MY fellow Kearnyite. We may even hear about the Fall release (?) of the FALCON. (I certainly hope it does better than the FORD Falcon!...or even, the Edsel!)

I just received my Winter '92 catalogue from B & C Computervisions of California and they offer Chromacad for \$27 with \$27 more for the surface shader (130 XE req.). That sounds a LOT like the 'discount' we were offered. Someone, please correct me if I'm wrong!

I mentioned earlier this year that I have many docs. for software, but not the software, itself. B & C has many APX classics (7.95ea or 4.00ea if you order 10). Only by pooling our buying power can we achieve discounts we deserve so; keep talking to each other and sometime, we may be able to put together a nice discounted order. Think about it! I will circulate photostats of the catalogue and if enough people get together, we may HAVE something. I remind you 16-bitters, B&C HAS 16-bit commercial and PD software, as well! PARTICIPATE!

Sam Cory wants me to demo my 'little known' word processor that doesn't require a disk drive! It DOES require one if you plan to save your document, but much of my correspondence need not be saved so I simply print two hard copies and everything vanishes when I power down. Since the demo will only take 5 or so minutes, I'll wait until the next administration when I'm not (not?) as busy.

'Til next month (and my Presidential valediction)....

---

## THE JACG ST VP's COLUMN

John H. Dean, PE, JACG 16-Bit VP

As I mentioned in my column last month, the JACG BBS is running along just fine, and can be the source of a lot of news, as well as enjoyment.

This month I have downloaded two files, extracted and then edited them for those of you who do not find it convenient to visit the BBS. Here is some stuff I think you might want to know about. Keep in mind that the file I have been working with has been derived from the messages that have been abstracted from different nodes on the Atari Explorer Online, and to the best of my knowledge, it is proper to be passed on to you readers in this manner. Note that much of the material is the answer to previous messages that have been posted on various BBS's.

### FALCON ROLLS OUT IN BOSTON

The Atari Falcon030 made its official US premier at a press conference at a Boston Computer Society meeting on September 23. This was the "rollout" for the new computer that had already made sneak preview appearances at the California Glendale Show as well as at Atari Messe in Germany.

Over 400 people were expected at the Wednesday night event that reprised Atari's revelation of the original ST computer at BCS in 1985. However, only about 150 people attended the meeting that featured Atari's Sam Tramiel, Bob Brodie, Bill Rehbock, James Grunke and Richard Miller.

A press reception at Boston's Copley Hotel before the event drew a satisfying mix of Wall Street Journal, television news networks, and newsletter editors. Overall, reactions to the machine have been universally positive, even if the enthusiasm hasn't been as widely distributed as hoped. The presentation of the new line of computers is being tailored to promote

Atari's Falcon as "the first system designed for Personal Integrated Media" Television tapings were conducted with Atari on Thursday following the introduction for a series called "PCTV" that claims 40 million viewers. Watch for repeat airings of this segment in your area.

### CAN YOU EVER HAVE TOO MUCH FALCON INFO?

In the "Flaming - Debating - Discussions - Rumors" category (18) from the "Atari 'Falcon' Project" topic (20)

Message 229 Sat Aug 15, 1992  
J.ALLEN27 [FAST TECH] at 03:12 EDT

The Falcon is a really really spiffy offspring of the STE and shares the same basic memory map. The top 1 Meg is used for IO devices, the next to top 1 Meg is used for Tos ROMs... That leaves 14 Megabytes out of the 16 Megabytes total address space. You can now use the full 14 Megs of address space as RAM, the RAM controller even does the work for you!!

Yes, the 030 chip allows more than a 16 Megabyte address space, but NOT when you are trying to be as compatible as possible to the STE. Far too many ST applications, especially games, are not and never will be "32-bit clean". So Atari made the new machine so it didn't require 32bit clean software, it will run the older non-32bit clean software...like Tempus the editor as an example, and Calamus 1.09N as another example. It's really a very nice compromise, and if you need more the 14Megs it can be arranged, by slapping a memory expansion board in the CPU expansion slot, rigged up to act the way TT ram does now in the TT...and on the Turbo030 accelerator ;-). So you could add, hmmm, 8 16Megabyte SIMMs, or something equally ridiculous. ;-)

On the video, yes, by implementing the "interlaced" mode you can get most resolutions on the SC1224, making the transition for ST users much less

costly to begin with. Neat.

NTSC has 525 periods of information between vertical sync pulses, so there is the ability to put 525 lines worth of info on the screen. Oops, that's 525 lines between even vertical sync pulses. Each period of information is unique, so that's about as close to having 525 lines of resolution you're going to get on a TV. But because TV is "overscanned" on the tube, you actually only see about 480 of those lines, the rest are "off screen". If you could scrunch the vertical size down enough you could see them all.

Overscanning is used so they don't have to be as precise in manufacturing the TVs about lining up the display on the tube, the whole tube face gets zapped, otherwise you'd have to precisely adjust the position of the display so it was located neatly on the screen.

The Falcon will be "acceleratable" easily, 40 or 50 Mhz would be the target for an O30, if you're going to the trouble of speeding up, why stop at 33? ;-)

Atari has been very sensible from the start on upgradability with the Falcon. If they can't meet the \$35/Meg RAM price, I'm sure a 3rd party will. Since the 4 Megabyte size board would require 8 1Megx4 chips, a small PC board, and an inexpensive connector, it should be salable for around \$159 retail, or \$40/Meg and still make a profit for the developer and dealer.

The internal IDE needs to be a 2.5" drive to fit, and I'm sure they'll leave the space there, ready to have a drive slapped in, no tricks, no hurdles, no crippling.

There's been a real, fundamental, change in Atari's view toward 3rd party enhancements and user upgradability, and the Falcon will show it.

The IDE and SCSI II ports are

DMA'd ports. The Blitter chip is used as a generic DMA controller, not only drawing lines on the screen like lightning, but also reading/writing to disk. Something the Mac's lack and could REALLY use. ;-)

The Falcon only knows about 14 Megs of RAM, CPU, blitter, DMA, etc. It is out of the box a 24bit machine...ie, only the first 24 bits of the 68030 address bus are connected to anything. This is REQUIRED in order to be thoroughly compatible with the ST software that is not "32-bit clean".

Yes, a 3rd-party can add "TT RAM" since the OS continues to have all the appropriate support built in. I'd assume that will happen, as I said, this is a VERY EXPANDABLE machine; there are very few limitations. However, adding "TT RAM" type boards will change the system into a 32bit device and it will then have some of the incompatibilities that the TT has. I'd suggest someone doing such a board include a "defeat" to allow return to 24bit-ness.

-----  
Message 55 Sat Aug 22, 1992  
D.ENGEL [Thunderbird] at 09:41 EDT

Towns: Here is a list of the most frequently asked questions, minus the questions about advanced models and marketing strategies...

Fire 1: Does the Falcon O30 come with MultiTOS. I mean, is it done and ready and shipping in Falcons, or will it be an 'upgrade'?

Fire 2: Has GEM been tweaked up with nice multi-colored (aka more than 2) Icons and Gadgets? Maybe even 3-D like buttons, etc?

Fire 3: In a 14 meg unit, where the 68030 doesn't "see" the last 2 megs, did you guys at least give the hardware access to it? Like, could it be used by the sound stuff, or the blitter? Is there possibly a way of "bank switching" a la 130XE, which lets

me use the RAM for anything? (I mean my whole computer only has 2 megs now, so it seems like a waste to not have access to it) I don't suppose that the Falcon RAM card only has 14 megs populated? Opinion around here says that it has the full 16 on it.

Fire 4: What is the difference about VGA monitors which won't let the Falcon do 16 bit color in 640x480 mode, yet it will work with a TV? I was always under the impression that TV was poor quality and that monitors were much better. Is it because of the interlacing?

Fire 5: Will I be able to take advantage of the new resolutions on my SC1224? If so, will they suffer because the monitor is outdated?

Fire 6: Does the BLITTER and other hardware video features work in ALL resolutions? The BLITTER seems to be set up for the 4 plane, 2 plane, and 1 plane modes of the ST. Have to new modes been designed to fit the Blitter, or the other way around? How about horizontal and vertical scrolling? Overscan?

Fire 7: How much does it cost to become a Falcon Developer? What would one get from Atari if one were to register?

Fire 8: Will MultiTOS really be able to run concurrently such existing programs like Pagestream, DynaCADD, Aladdin, etc? Or, will only special versions run with it? Also, is there a "I'm a bad program and I only run when I have the whole system" mode, which will allow poorly written programs to run?

Fire 9: What portions of MultiTOS are on disk? Does this mean that perhaps periodic upgrades to the disk portions of MultiTOS will be available on the Official Online Service of Atari Corp? Why put it on disk in the first place? It's not a RAM hog like windoze, is it?

Fire 10: Can you tell us about any potential uses for the DSP, other than the sound processing capabilities?

Thanks for taking the time to read and consider these questions, which have been nagging at us all for so long. It seems like every answer spawns 10 more questions, but any information is truly appreciated. thanks.

Message 62 Sat Aug 22, 1992  
TOWNS [John@Atari] at 17:25 EDT

1. To my knowledge, MultiTOS is NOT currently shipping with the Falcon030 machines in Germany. I don't know when that will happen, but we still have some work to do on MultiTOS.

2. The Falcon030 version of TOS (known as TOS 4.0) has numerous new features. They include support for DMA sound playback and record, DSP support, 3D objects (the windows from the desktop are 3D), sub-menus and popups built into the OS, and up to 256 color icons.

3. Currently, the extra 2 megabytes is not available for use in Falcon030. They do have the full 16 megabytes on the board.

4. True Color, 640x480 on a VGA monitor is too much bandwidth for the video hardware to handle. TV modes look okay, but I think the best route is an Atari color monitor (the same as the current Atari Color monitor).

5. Yes. And no.. the new modes look fine on a SC1224.

6. There is a re-designed BLITTER in the video chip that runs at 16Mhz instead of 8Mhz and is used in all modes. Overscan is built-in and Hardware scrolling works the same as the STE.

7. The developer information has not changed. You should talk with Gail Bacani at Atari.

8. If you have a bad program, you should pressure the author of the program to fix it. However, if you run that program as the only program in the system, it will probably work. Besides, since current versions of MultiTOS are soft-loaded, you can disable MultiTOS when you boot up your system for those annoying programs. And yes, MultiTOS does run existing applications concurrently. There are some programs that don't work, but the major applications are running now or may require a small update.

9. MiNT and the new AES are on disk. The VDI and the lower level OS functions are used out of ROM. MultiTOS does use some RAM, how much I am not sure about. As for availability of MultiTOS, I have no idea when that will happen and how it will happen.

10. Well, it can be used for decompress of JPEG pictures. We are already doing that here at Atari. How about a modem? There are DSP modems out there that are just an adapter that plugs into the DSP port and processes the analog signals from the modem.

If there is anything else.. or you would like me to expand on something, please feel free to jump in and ask.

-- John Townsend, Atari Corp.

Resolutions available on the Atari Falcon030 (c) 1992 Atari Corp. Written by John Townsend

This document may be reprinted again and again as long as the Atari copyright remains intact.

A couple of notes: Unlike previous machines, there are just too many resolutions to give each resolution a name. Therefore, I will do my best to describe what the resolution is and which monitor it is on.

- NOTE: TV and a Color Monitor are the same.. by Color Monitor, I am talking about the standard SC1224. By

VGA, I mean a standard VGA Monitor.

40 column modes ("column" means the number of x pixels divided by 8)

-----  
4 color, normal, TV:  
320x200, 4 colors, 2 planes  
16 color, normal, TV:  
320x200, 16 colors, 4 planes  
256 color, normal, TV:  
320x200, 256 colors, 8 planes  
True color, normal, TV:  
320x200, true color

4 color, interlace, TV:  
320x400, 4 colors, 2 planes  
16 color, interlace, TV:  
320x400, 16 colors, 4 planes  
256 color, interlace, TV:  
320x400, 256 colors, 8 planes  
True color, interlace, TV:  
320x400, true color

4 color, normal, VGA:  
320x480, 4 colors, 2 planes  
16 color, normal, VGA:  
320x480, 16 colors, 4 planes  
256 color, normal, VGA:  
320x480, 256 colors, 8 planes  
True color, normal, VGA:  
320x480, true color

4 color, line-doubling, VGA:  
320x240, 4 colors, 2 planes  
16 color, line-doubling, VGA:  
320x240, 16 colors, 4 planes  
256 color, line-doubling, VGA:  
320x240, 256 colors, 8 planes  
True color, line-doubling, VGA:  
320x240, true color

80 column modes

-----  
2 color, normal, TV:  
640x200, 2 colors, 1 plane  
4 color, normal, TV:  
640x200, 4 colors, 2 planes  
16 color, normal, TV:  
640x200, 16 colors, 4 planes  
256 color, normal, TV:  
640x200, 256 colors, 8 planes  
True color, normal, TV:  
640x200, true color

4 color, interlace, TV:

640x400, 4 colors, 2 planes  
16 color, interlace, TV:  
640x400, 16 colors, 4 planes  
256 color, interlace, TV:  
640x400, 256 colors, 8 planes  
True color, interlace, TV:  
640x400, true color

2 color, normal, VGA:  
640x480, 2 colors, 1 plane  
4 color, normal, VGA:  
640x480, 4 colors, 2 planes  
16 color, normal, VGA:  
640x480, 16 colors, 4 planes  
256 color, normal, VGA:  
640x480, 256 colors, 8 planes

4 color, line-doubling, VGA:  
640x240, 4 colors, 2 planes  
16 color, line-doubling, VGA:  
640x240, 16 colors, 4 planes  
256 color, line-doubling, VGA:  
640x240, 256 colors, 8 planes

and lastly.. there are compability modes for ST Low, ST Medium, and ST High on both VGA monitors and SC1224 monitors. (On a color monitor, ST High is achieved by using the interlace mode).

Also, the ST Monochrome monitor (the SM124) will work with Falcon030 as well. However, it only supports one resolution: ST High Resolution.

All modes on a TV can be overscanned. This means multiplying the X and Y resolution by 1.2. For example, modes with 320 pixels of horizontal resolution (X res) will become 384 pixels across, and modes with 640 pixels will become 768 across. Overscanning is done in the X and Y resolution. You can't do them independently. Special Note: On a VGA monitor, overscan is "faked".. since the video hardware doesn't have the capability to do overscan on a VGA monitor, we made it so that if a overscan mode is set on a VGA monitor, you still see the normal size screen, but the screen is a window onto the bigger overscanned image. Make sense? We did this for compatibility. This way if a game that has an overscanned

startup picture can use the same pic on both the VGA monitor and the TV monitor. Pretty cool, eh? <grin>

BTW.. Overscan can NOT be set from the desktop. The AES and Desktop will work just fine with it, but because you can't see the parts of the screen, we thought that that option shouldn't be available from the desktop. We don't want to confuse people. However, Overscan can be set using a new XBIOS call (Vsetmode()).. so it is still available.

I hope I haven't made any mistakes. I triple-checked this document in search of errors and I couldn't find any. If you do find some, send me Email on GENie (to TOWNS) or CIS (70007,1135) and let me know.

-- John Townsend, Atari Corp.

PS. Anyone who would like to reprint this message, please do so! The smaller the number of times I have to type that message, the more my fingers with thank you! ;-)

After looking at this one more time.. one point to clear up: By saying SC1224 Color Monitor, I mean any Color Monitor that Atari have manufactured for the ST/Mega/STE/MegaSTE computers. Clear as mud? ;-)

#### MASSIVE MEMORY FOR THE PORTFOLIO

Perhaps the most exciting new products anywhere for the Atari Portfolio palmtop computers are the new 1, 2 and 4 meg Flash Memory Cards from Optrol Inc.. These massive storage cards fit entirely inside the Portfolio memory card slot. The nonvolatile read/write memory has 10 year data retention with no batteries. Driver software on the card allows the user to read and write from the Portfolio or the PCcard Drive just as if it were a huge ramcard. The software also allows the user to flash erase 64k blocks of memory up to 100,000 times to make them available for reuse. List prices are



\$179, \$254, and \$399 for 1, 2, and 4 meg cards. Optrol Inc., P.O. Box 37157, Raleigh, NC 27627, 919-779-3377.

**"OPERATION: A.C.T. NOW"**  
Atari Community Together Now

**Campaign Organizers:**

Len Stys, J.J. Legett, Mark Leair

Sponsored by: The Cleveland Free-Net  
Atari SIG

September 12, 1992

**INTRODUCTION**  
-----

"OPERATION: A.C.T. NOW" is a series of campaigns that will help increase support for the Atari 8-Bit computers, ST/TT/Falcon computers, the Portfolio palmtop computer, and the Lynx handheld video game system.

Atari Corporation seems to be serious about the future... If you would like to help increase support for Atari products, you can by participate in these campaigns.

Who benefits? Everyone benefits. Atari users get more out of their investment, developers sell more products, dealers sell more products, publishers sell more magazines, and Atari Corporation sells more products. If you are a shareholder, your stock may go up in value.

There will be campaigns that focus on increasing support for the Atari ST/TT/Falcon and campaigns that focus on increasing support for the 8-Bit Atari, Lynx, and Portfolio. The campaigns that you participate in are entirely up to you.

These campaigns will hopefully result in a stronger Atari Community. If you don't wish to help Atari Corporation, participate in these campaigns to help yourself. You will enjoy your Atari products more by greater support!

Cost?

-----

There is no cost to you in any way to participate in these campaigns. There is no registration fee and no donations are being accepted.

**Members Key to Success**  
-----

The number of people participating in these campaigns are extremely important. The news of these campaigns must be shared with every member of the Atari Community that you know. "OPERATION: A.C.T. NOW" should be publicized in Atari publications, at user group meetings, and at Atari dealerships. If you take action, we can make a difference. If you sit back and watch, we won't do anything.

+-----+  
| CAMPAIGN ONE |  
+-----+

The first campaign will be to compile two lists. One list will consist of things that we believe the company is doing right. Atari is doing great things and if you want to continue seeing the company doing these things, you have to let them know. The other list will consist of things that we believe the company can do better. The company will never know the problems that you see unless you tell them. We will send these lists to Atari Corporation's Board of Directors and ask that they consider our suggestions. Will Atari listen? There isn't a successful company around that doesn't listen--especially to their customers, developers, dealers, and publications.

What you need to do is write down everything that you see right with Atari and the things that you believe the company can improve. Include any past experiences that you have had with the company.

If you wish to remain anonymous,

you may send these lists in another envelope.

The goal of this campaign is to inform Atari of things that we believe can help improve the company's position in the computer marketplace.

All of the lists that are received will be compiled and then sent to Atari Corporation.

+-----+  
| CAMPAIGN TWO |  
+-----+

The second campaign is to concentrate on letting computer publications know that Atari is back.

The Falcon 030 will be announced at the Boston Computer Society meeting in a few weeks. We should let the media know that we would like for them to cover it. The amount of press the Falcon receives will most likely determine when the Falcon will be shipped to the United States and how many are shipped.

What you need to do is list names and addresses of publications that you wish to see cover the Falcon's release. These include magazines, newspapers, and television news programs.

You should also lists computer publications that you wish to see support the Atari ST and Falcon computers.

This information should be sent along with the "OPERATION: A.C.T. NOW" registration form.

Since the Boston Computer Society meeting is on September 23rd, we are asking you to send us this information immediately. You may ONLY send this information through E-MAIL if you are able to at: "xx004@cleveland.Freenet.Edu". Please send any other information through the U.S. mail.

The Cleveland Free-Net Atari SIG

is the official site of "OPERATION: A.C.T. NOW". If you wish to add any information or discuss anything related to this campaign, a special section has been created specifically for it.

The Atari SIG can be accessed by the phone number "216/368-3888" at either 300, 1200, or 2400 baud. It can also be accessed by users from around the nation or world for free by using "telnet" at their college or business by the following Internet addresses: hela.ins.cwru.edu = 129.22.8.38 Type 'go atari' at any menu.

The Cleveland Free-Net Atari SIG's U.S. mailing address is:

Cleveland Free-Net Atari SIG  
P.O. Box 364  
Mentor, OH 44061-0364

The Cleveland Free-Net Atari SIG's Internet e-mail address is:

xx004@cleveland.Freenet.Edu

"OPERATION: A.C.T. NOW" is in no way affiliated with Atari Corporation. These campaigns are organized by individuals that have an interest in Atari products. The "Atari" name, logo, and any other Atari products mentioned are copyrighted by Atari Corporation.

---

## 8 - BIT FEATURE

*2 BITS FROM 8-BIT VP  
by Joseph E. Hicswa - JACG*

September 12 meeting of JERSEY ATARI COMPUTER GROUP was another historical experience for our club. We moved into a new meeting area of AT&T BELL LABS in Murray Hill, N.J. We're still on the same grounds, but use a meeting room in the main building. (Refer to articles by Prez'ing Ed and Dave Noyes in our September newsletter).

Like any new ATARI computer owner, we attendees learned and adjusted to

the new environment. We corrected bugs: found our new meeting area, rearranged tables; relocated demo monitor; setup protocol spot for president, 8 and 16 bit demoware, newsletters, disk sales, fleamarket goodies and learning where the bathroom was located. It was fun! It was exciting! We also found a spot for our JACG banner.

SAM CORY had a BIG sign advertising 8-bit Disks Of The Month: TEXT PRO (word processor), and DISKMASTER (a repair utility). Sam is holding a FALL SALE, (September & October) ten disks for 10 dollars. WOW! ALL THOSE PROGRAMS FOR TEN BUCKS. Yes sir! Librarian Sam is a true Inflation Fighter!.

Among the flea marketeers was 16-bit VP John Dean who must empty his 8-bit computer den at home to make room for family. There were bargains, bargains, bargains. I bought another 800 (4 now) with 8-bit programs and manuals at affordable prices. Joe Roborecky offered SPARTA DOS at a HURRY-UP-BUY-ME price -- quick, before someone else does.

During the question and answer period I learned how to solve a graphics mode 2 problem wherein ATARI character set is split in half: either UPPER CASE & numbers or lower case with graphics. I wanted to display a deck of cards with uppercase K(ing) Q(ueen) J(ack) T(en), 1 to 9 also graphic heart club diamond or spade. Explaining my problem at meeting, I got a solution from Editor Dave Arlington and William (Bill) Bingham. They explained how both UPPERCASE and GRAPHICS are printed/displayed simultaneously. Ah the things that can be accomplished with our classic ATARI 8-bit computers. And there is still so much more to learn and do with them.

President Salvesen and Joe Roborecky gave reports about an ATARI fest they attended. 16-bits blocked out 8-bits, kids monopolized games, some software dealers did big business,

the seminars were informative, educational.

President Ed said the main support for 8-bits are ATARI computer clubs. There are ATARI owners who do not know about us. Spread the word. That's what we're all about.

Pre-teenager Anthony Innone did first 8-bit demo -- a video, audio program he developed to teach Italian. coordinating disk and cassette, his program explains, asks questions, and checks answers via screen and loud speaker. The sight and use of cassette player elicited nostalgic comments from older members who remembered when they first entered the world of ATARI using 1010 cassette player. Several were amazed by what new generation ATARI users can accomplish with classic equipment.

Sam Cory pointed out the many cassette programs listed in the NEW ATARI USER, Page 6 Publishing, Box 54, Stafford ST16, 1DR ENGLAND. A copy of magazine circulated during the meeting. It is outstanding for 8-bit owner/users. Subscription is 15lbs; disk edition 42lbs Check your bank for pound money orders VISA/MASTER cards are accepted. (NEW ATARI USER is not the ATARI USER--made in America--that we distribute free at meetings).

Our second 8-bit demo was given by Sam Cory -- an extension of TEXTPRO. Because there is so much to this program, Sam dwelled only on part: MENU, SEARCH and REPLACE. If this program is not yet in your library, get a copy at next meeting. Both Sam Cory and Dave Arlington handle 8-bit disk sales before & after meetings.

November is club officer election time. Check executive committee list on back page of newsletter and ask a member to nominate you.

I've applied for presidency. We need an 8-bit VP to bring club computer to meetings. Also a treasurer to deposit money in the bank and issue

checks to pay bills. If you can maintain a list of member names and address, we need you as Membership Chairman. Speak to me or another officer at a meeting. WE WANT YOU! I WANT YOU!

We thank Bill Bingham who now delivers newsletters to post office for members unable to attend meetings. To all of you who receive newsletter via mail. I hope you send a THANK YOU to Bill c/o our club box number on rear page.

NOTE: Postage dwindles our treasury. Pick up your newsletter at meeting and receive a free ticket for door prizes. September prizes were many 8-bit stuff donated by members moving into 16-bit department.

Scanning through above mentioned NEW ATARI USER I noticed they also solicit programs & articles like the American ATARI publications. Here's opportunity for you writers & programmers to make double submissions--one abroad and one in the USA. Become world famous. Make us proud of you.

NEW ATARI USER had reviews for DOUBLE AGENTS--Super Split Screen Spy Action; also TEXTPRO which we all know is one outstanding, PD domain word processor; COPYMATE 4.3 for speedy, multiple disk coping; X-WORD--15x15 square grid with 26 puzzle versions. Solver may switch between horizontal and vertical clues; ENHANCED POKEY PLAYER (music) listen, read or write it; SHERLOCK 1050 probes every nook and cranny of a disk to be examined altered, or copied; TRANSDISK IV copies cassette programs to disks.

Articles were FIRST STEPS IN ASSEMBLY shows how easy it is to learn and use; EIGHTY COLUMN SECTOR EDITOR, a program you type to study and RUN. Examine any byte on disk; VAREEDIT (variable edit) another program to be typed, studied & RUN. It locates and list all variables in a program; TUTORIAL TIME shows mini programs that

Centers Text, Round off dollars and cents, and prevents a line scroll when text ends on screen bottom TRIGONOMETRIC FUNCTION draw geometrics using ATARI math functions; GOOD NEWS, reviews of new German 8-bit software; FRUSTRATIONS, what happens when user, writer, programmer misconcentrates on the job; AWAY FROM THE KEYBOARD, info about the inventor of ATARI systems, sold it and is now sorry. Yes, there were some 16-bit articles too.

See you all in November: Remember I am a candidate for President. Your vote is important to me and all candidates. See you then. Bring a friend.

---

### 8 - BIT FEATURE

#### *8-BIT PD LIBRARIAN'S REPORT by Sam Cory, JACG 8-bit PD Librarian*

Another month closer to Election Time. First, VOTE for Pres of USA. If you are like me WHO?????, but VOTE, VOTE, VOTE. That comes one to a customer. Last, come to the JACG Election of its P, and VP's. If you do not know the schedule look at our fabulous September newsletter. Read Dave Noyes column.

DOM's this month are two: JACG 256D is two sides of RLE PICS; and JACG 257 an all new Ol Hackers disk, always a real treat. Never expect all the files on an Ol Hackers disk to be on the menu. They sneak some other files that do appear on the disk directory.

Those of you who attended our September meeting saw me confused by a text sample on the monitor. I hate confusion, perhaps because it is in my presence daily. Thus, it demanded an examination of TPX, and the explanation which follows. TEXTPRO (TPX) has 80 full pages of well explained docs for TPX 4.54+ on JACG 205D. An additional 10 pages for TPX 4.56 on JACG 254D. I confess I have left much unread, and only read when some function is needed. This time the function was "FONTs". It

turns out there are several ways Fonts are used and available in TPX. ATARI fonts, and specialized TPX fonts. One specialized font is for the production of macros. It was the one we saw at the meeting, not the ATARI font I expected. The carriage return ASCII characters were what I expected to see: not those strange characters. At one time we had to use one of several files to convert those symbols to our regular carriage return...

Those symbols are produced by pressing ESC then CTRL-M; ESC then CTRL-J. If you read the appendix docs (4.56) B.3.1. Changing Fonts, the prompt is: SELECT+CTRL-T(Font Load) command. Next see "ATARI Font: Sure [Y/N] "Y" means the ROM Font (ATARI). "N" gives the prompt "Load Font>D:". In all Textpros it is TEXTPRO.FNT. This font called by TPX as the Editor font. You can change fonts at any time. Just for fun load TEXTPRO.FNT to the editor and see the font. Also, unless you specify another font all printing will be ATARI (ROM) font. The Editor Font is NOT the one printed. You have the unique ability to see all your fonts in the Editors, and or make many disks of TPX each with a different font that is used by that TPX in both places: Editors; and Printing.

By the way if you want a real text on macros, and a vision of how programmers work buy JACG 247D produced by John McGowan. It is full of information produced by a man who loves to teach. He makes macros using GOSUBS, and SUBDIRECTORIES. Utterly fantastic, and a goodly number that you may find useful. He also talks about using DD3 fonts in TPX.

Be reminded TPX often does not prompt "ARE YOU SURE Y/N". I had to write this twice because of loading another file into editor 1 where the first copy resided. I was quite annoyed, and ready to throw the computer through the wall, but where would I get more ATARI machines?

Another Sam mistake. On purpose I

did not make the TPX disks with a dos. You must supply your own favorite dos, and TPX will use it. Look up dos in TPX docs. If you want to print or read the docs without a dos on the disk bring up dos 2.0s or 2.5 and COPY the docs to E: or P:. I made what I thought was a big point at the September meeting in hopes this problem would not arise. Of course, you at home could not hear me - my voice was too low. I appologise. I guess I will have to change the disks and add dos 2.5 and a STARTUP.BAT. VERY, VERY important is the choice of Textpros. If you have a 130XE or compatable then use JACG205D - TPX 4.54+ and enjoy 3 15k editors. If you have an 800XL or an 800 you can use TP.COM, or TPX 4.54+ and have one editor of 18k. I have just made a dos 2.5 disk with TPX 4.54+ which gives me the three 15k editors on my 130XE. You do not need SETUP, or RAMDISK. TPX will ignore those files. I had to go from my normal setup of SPA 3.2 + TPX 4.54+. For some reason my SPA 3.2, or the X cart can not read INVERSE in the disk dir. I have disks using that method. When I try to use TPX CNTRL-M, or CNTRL-L \*.\*D to see the dir all I see is nothing and a big burp of sound. With dos 2.5 everything goes smoothly. Now with SPA and TPX I can read text and put those dir files in my master disk dir list. [[ In this process I expect to bring our present listing up to date.]] Otherwise I would have to go into each inverse disk and eliminate those characters. Too much work for me.

DISK MASTER dox must be read unless you are familiar with disk examination programs.

Did you buy JACG Disk DLA? Are you going to buy 10 disks from the DLA for \$10? This deal was only for Sept, Oct 1992. I will have the same deal in Nov/Dec for ANALOG. Pick from the entire 75. This is a way to have the disks for those issues you purchased or had given to you.

-----  
16 - BIT FEATURE

**GEMULATOR UPDATE**  
by Darek Mihocka

Gemulator - ready to ship, lower price!  
Upgrade your PC compatible 386/486  
computer to TOS 2.06 for under \$200!

This is just to inform everyone  
that Gemulator is being released at a  
new lower price. Until September 14th,  
you can order the Gemulator board and  
a set of TOS 2.06 ROMs for only \$199,  
or you can purchase it at the Glendale  
Atari show on September 12th and 13th  
for the same price.

This offer is being made by Purple  
Mountain Computers so if you have  
questions call them (PMC) at  
206-747-1519.

---

**GENERAL FEATURE**

**ULTIMA ADVENTURES: ULTIMA II**  
by Dave Arlington, JACG

Last month I reviewed and gave out  
tips on the first of the excellent  
Ultima series available for both the 8  
and 16 bit Ataris. This month we  
continue the series with **ULTIMA II:  
REVENGE OF THE ENCHANTRESS**. As with  
last month, while you will receive  
clues to help you win and enjoy the  
game and especially ease some of the  
frustration, I try to avoid to out  
right walk throughs that would take all  
the fun out of the game for folks.

If you remember from last month,  
the world of Sosaria was being  
threatened by an evil wizard named  
Mondain, which was vanquished by a brave  
hero from another dimension, namely you  
if you followed the clues. However, it  
turns out that Mondain had an  
apprentice, a young enchantress called  
Minax who was none too pleased at you  
offing her tutor. She has declared  
revenge on you.

Ultima II is different from all  
the other Ultimas in many ways, one of  
which is that unlike the other 6  
Ultimas which all take place on

Sosaria/Britannia, Ultima II takes  
place on Earth! True, it is quite  
unlike Earth as we know it today, due  
to its being warped by Minax's evil  
Sorceries. Minax has followed you here  
bent on revenge against you. Books  
found on Britannia in the times of  
Ultima V and later insist Ultima II  
happened on Sosaria, but personally I  
believe those references are probably  
due to the citizens of Britannia having  
just a hard a time in believing in the  
existence of a place called Earth as  
many of you probably have believing in  
Sosaria as a real place.

Other differences abound too from  
all the other Ultimas. Ultima II is the  
only Ultima where dungeons (and their  
above ground counterparts, towers) do  
not play an important part of the game.  
It is the only Ultima where magic is  
totally unnecessary. It is the only  
Ultima with time travel to multiple  
worlds, and space travel to outer space  
worlds. It is the only Ultima with  
airplanes and the KGB. That's right,  
the KGB!

Anyway, the first thing you have  
to choose as usual is your race, sex,  
and character type. In Ultima I, I  
recommended becoming a cleric due to  
their spell casting abilities. However,  
here is one very important thing to  
know about Ultima II: You DO NOT need  
to EVER enter a dungeon or tower in  
this game to win it. Everything you  
need can either be obtained in towns  
and castles or can be won in combat  
outdoors from monsters. Just make sure  
to save, save, save and not to go in  
any dungeons unless you just happen to  
be curious.

So, anyway, since you do not need  
to go in any dungeons and magic only  
works in dungeons, QED says, magic is  
useless in Ultima II. So, become either  
a Fighter or a Thief and leave Mage and  
Cleric alone for people who don't read  
this! Like Ultima I, all attributes can  
be boosted from their initial scores,  
it makes little difference what other  
choices you make. Either a Dwarven  
Thief or a Elven Fighter (which I was)

are good choices as they boost the best abilities to have, Strength and Agility. Wisdom and Intelligence in Ultima II are the least important, so don't waste any extra points there.

After making your character, you are dumped into the Earth of 1423 B.C. It looks a lot like our Earth these days except Russia and Alaska are connected by a land bridge so you can get most anywhere in the world except for islands like England and Australia. There are three places to visit in this time to go spend some money for food and weapons. There is Lord British Castle in England (This castle also exists in 1990 A.D. where you will spend a lot of time.), Towne Linda in Italy, and Le Jester town in the south of Africa. Visit all the places here, map out the towns, but some stuff, talk to the natives in each town, and write down prices for stuff you will need.

Besides the towns, castles, and of course, monsters (your main source of working capital), the main things you have to learn to use and map are the time doors that appear quite often. Just north of Town Linda is a time door that will take you to England in 1990 A.D. where you can enter both Lord British's castle and the town of Port Boniface. These are important since Lord British will sell you needed hit points and Port Boniface will sell you needed food. Plus Port Boniface has a takeout window where eventually you will be able to steal food for free and then run out of the town by just moving right a few steps before the angry guards can reach you. Although you cannot reach it yet, there is also the town of New San Antonio in 1990 A.D. in Texas that is a VERY important place in this game.

When starting out in the game, the best thing to do is to keep popping back and forth from 1990 A.D. where you can buy hit points and food, and 1423 A.D. where you can fight monsters to build up gold. As you keep fighting monsters, keep checking your inventory and you will find monsters also give

you other cool presents besides gold, almost all of which have some valuable use. The really important things you can win from monsters are Boots, Cloaks, Helms (these allow you to use the View command!), Ankhs, Skull Keys, Brass Buttons, Blue Tassles, Green Idols, Strange Coins (these allow you to use the Negate Time command!), and Try-lithiums (fuel for the spaceships!). All other things you can win from monsters are either for use in dungeons or have no known use at all. One important thing you will want that you CANNOT get from monsters are Keys. Of course, since the only locked doors are in towns and castles, why would monsters be carrying them. Look to the logical suspects in town to be carrying Keys when you feel strong enough to take them on.

The other time periods to visit are Pangea (9 Million B.C.) with only one village deep in South America (or where South America WILL be when the continents break apart!), but lots of monsters to fight and get gold and experience from. There is also Aftermath (2112 A.D.) when a nuclear war caused by Minax has fragmented all the continents and left destruction behind. There is only one destroyed village here in Aftermath called Pirate's Harbor which is the whole of time's only source of spaceships. The last timeplace to visit is the Time of Legends which exists outside of normal time and space and only has the Castle of Minax to visit (along with the most intense collection of heavy duty monsters you will ever see!). Be very careful when visiting here until you are much much stronger.

The instructions list 9 planets to visit with coordinates for all. Don't try visiting the Sun by the way! There is one very important planet that is NOT listed and you will have to talk to many town residents on Earth's many times before you will find out where this planet is located. Most other planets are not necessary to visit except a couple listed as having life have some important clues in their

otherworldly towns.

However, long before worrying about space, you should look to buy a horse to cut down on food usage, and look to steal a boat from brigands. Getting a boat in every time period and as many as possible is VERY important. You can easily shell monsters from offshore with a boat with no harm to yourself, and boats have MUCH better firepower than you ever will! Getting a boat is easy if you won the right prize from a monster off the list a couple paragraphs back. If you have it, you can walk right onto a boat and (B)oard it and it is yours!! Plus, there is a great Easter Egg in Ultima II. After you win a boat, sail to the left, and a boat gets left in the space behind you which starts attacking you. You can get off your boat, step onto this newly appeared boat, (B)oard it, and now you own TWO boats! You can duplicate this trick until you have a whole fleet!!

If there is one complaint I have about Ultima II, it is that the clues you get from villagers and townspeople are very vague on some very important things. You could play forever and not stumble on some of the right things to do. None of the other Ultimas are as obscure as this one with their clues, another dubious distinction for this Ultima.

Since some of the clues are really obscure, I will be more explicit in some hints than usual. You will get clues to go get a blessing from someone in outer space. What is not clear that after getting the blessings, if you visit an old man hidden away in New San Antonio behind some locked doors, for 500 gold he will give you a VERY important item needed to win the game. There is also someone locked away in New San Antonio Prison that will sell you the ultimate Weapon for another 500 gold pieces. Lastly, if you (O)ffer the Hotel Clerk in New San Antonio 100 gold pieces at a time, very often each offer will result in one of your attributes going up by four at a time. You need to

get Strength and Agility way up there so you can use the best weapon and the best armor.

Since there is not that much exploring to do here as in other Ultimas, after awhile the strategy becomes fight, fight, fight, buy food, hit points, and attribute points from the clerk and then repeat the process some more. Having a boat is a big help. Getting a boat in town is cool too, because then you can sit there in town in your boat and blast away at the fellows who carry those important keys.

Eventually you will be able to have enough Keys to steal an airplane from New San Antonio. These are great because you can do aerial reconnaissance without being hit by monsters at all. You can land on any clear area, fight some monsters and then take off again. Since airplanes can go through time doors, they are really useful in Time of Legends because you can get Minax's hordes of monsters to chase you all over the place including away from her castle by landing and waiting a bit then taking off.

When you have maxed out your hit points (up to 9999 points), maxed out your Strength and Agility, got the best armor, got the special weapon and special item from New San Antonio, and have a really good supply of Strange Coins, you can make your assault on Minax in her castle. She hides in the upper right portion of her castle protected by lots of nasty monsters! Use the Coins to freeze them best you can and go find her and get her! After you hit her once, you will find out her name should be Minx instead of Minax as she teleports away to the lower right corner of the castle where you have to go chase her down through the gauntlet of nasty monsters again. (See why I said you need a big supply of Coins?) Every time you get close enough to hit her (and meanwhile she is blasting away at you herself!), she teleports to the other corner and off you go again!!

If you are prepared enough, you



CAN outlast her though, and watching the destruction of all her evil works and the time stream slipping back to a normal Earth is a much nicer reward than the simple message of Ultima I.

Next month (if I can finish by then!), hints and tips on Ultima III:  
EXODUS!

---

**GO WITH JOE**

**FOR PRESIDENT**

**A DEDICATED, PROUD ATARI MEMBER OF  
JERSEY ATARI COMPUTER GROUP.**

**Paid for by committee to elect Joe Hicswa President**

**GO WITH JOE**

**FOR PRESIDENT**

**A DEDICATED, PROUD ATARI MEMBER OF  
JERSEY ATARI COMPUTER GROUP.**

**Paid for by committee to elect Joe Hicswa President.**

## Noise from Noyes

- D. B. Noyes, JACG

### MEETING PLACE

It appears that our new meeting place in the conference room just to the right of the guard station in the lobby of the main Bell Labs building is totally suitable for our current needs and our current membership. At least, as it appeared to me at our last (September, 1992) meeting (and first in the new "digs"). All functions which normally comprised our past Bell Labs auditorium meetings were part and parcel of our latest (non-auditorium) meeting. In fact, communication and interaction seemed to be easier and more abundant!

### NOMINATIONS

October is the month for nominations for the elected portion of the Executive Board, with final nominations and the election to occur in November 1992. This election will determine the leadership and guidance of the JACG through October, 1993.

### NON-JACG ATARIANS

Our meetings have always been open to all interested; that is, whether computer owner or not, and whether ATARIAN or not, and (of course) whether JACG member or not. There are some members who think that simply advertising, or making known (to new or old non-member ATARIANS) the fact of our existence and value, will bring additional members into the JACG. I beg to differ with this belief for the following reason(s).

I get approximately two calls a month for ATARI owners *in extremis*, that is to say, ATARIANS who are having ATARI related hardware, software, and information problems. I make every attempt to help them solve their problems, get the appropriate information, or get them in contact with someone who can. I further invite them to our meetings, explaining the benefits of membership including problem resolution, information and demonstrations, and our excellent monthly newsletter. **NOT ONE** (and I take their names) has come to a

single meeting, or joined the JACG. I leave newsletters at both Dependable Parts and Software Spectrum. In fact, each time I go to Software Spectrum (approximately once a week), I meet non-JACG ATARIANS, again many with questions. I help them out, inform them of the club, it's benefits, meeting schedule and place...to absolutely no avail. And these are people who need help!

Further, we have an excellent BBS; it gets calls from all around New Jersey, and from out of state. It is network linked with other BBS's. Our existence is also known through this electronic medium...where are the crowds of local, non JACG ATARIANS knocking down Bell Lab's doors every second Saturday morning of the month?

It is about time for any disillusioned to look at the handwriting on the wall. The JACG will exist for those of us who currently care for, and value it's existence, and not for a minute longer. To think that squandering the club's dwindling resources on a pointless attempt to gain membership (as opposed to utilizing our remaining resources to on-going support for existing and loyal members) is nothing short of ridiculous, and a total waste of the club's treasury.

### ST DISK LIBRARY

Five new disks again this month! John Dean has again updated the JACG Disk Library listing through disk JACGDSDD.283, along with providing the listing disk, John has provided disk 283 also. Added to those two disks, I have provide three additional disks for a total of five. Again this month, all five can be had for a paltry (mere) \$10.00 (yes, only ten dollars!). One of the disks will be available as a Disk of the Month for \$3.00 (three dollars), the others for the usual ST library price of \$4.00 (four dollars).

Disk contents run the gamut of games, utilities and applications...that is to say...there is enough diversity to satisfy all ST owners. 'til next month...

# Software Spectrum

386 Somerset Street  
North Plainfield, New Jersey  
07060

Telephone: (908) 561-8777

Hours: Monday through Saturday  
10:00 am to 7:00 pm

closed Sundays

ATARI software and hardware at competitive prices.  
Accessories and IBM software and hardware also available.

Many items sale priced - discount to JACG members.

**JACG INC**  
Jersey Atari Computer Group  
P. O. Box 5206  
Newark, NJ 07105-0206



A.B.U.C.  
Wieschenbeck 45  
Herten BRD W-4852 WEST GERMANY

# JACG NEWSLETTER

## JACG Membership Application

Dues, Including Newsletter \$25.00

Renew  New  Former

8-Bit  ST/Mega

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_

State/Country/Zipcode: \_\_\_\_\_

HomePhoneNumber: \_\_\_\_\_

BusinessPhoneNumber: \_\_\_\_\_

Mail to: JACG Membership Chairman  
P. O. Box 5206 Newark, NJ 07105-0206

## Executive Committee

**Ed Salvesen** PRESIDENT  
841 Kearny Ave., Kearny NJ 07032 (201)955-1572

**John H. Dean** 16-BIT V.P.  
RFD #2 Box 788 Sussex, NJ 07461 (201)-827-3902

**Joseph E. Hicswa** 8-BIT V.P.  
23 Passaic Avenue, Apt. C3, Passaic, NJ 07055 (201)-472-5190

**Susan Castle** SECRETARY & MEMBERSHIP  
46 Roseland Ave. Warren NJ 07060 (908)-757-5603

**Jack Rutt** TREASURER  
52 Decotah Avenue, Rockaway, NJ 07886 (201)-625-0273

**David Arlington** EDITOR  
Eagle Rock Village, Bldg. 8 Apt. 3B Budd Lake, NJ 07828 (201)-347-5227

**David B. Noyes** 16-BIT LIBRARIAN  
3 Ann Road, Long Valley, NJ 07853 (908)-852-3165

**Sam Cory** 8-BIT LIBRARIAN  
P. O. BOX 368 Stairtown, NJ 07825 (908)-362-5474

**Joe Kennedy** PRESIDENT EMERITUS  
126 Jupiter Str., Clark, NJ 07066 (908)-388-6717

**ASSISTANT LIBRARIANS**  
(8-BIT) Bill Garmany Jr., Ed Salvesen  
(16-BIT) John H. Dean

**BULLETIN BOARD SYSTEM OPERATORS**  
Gary Gorski, Joseph Kennedy  
JACG BBS - (201) 690-6224  
Blank Page BBS - (908) 805-3967  
JACG BIG BROTHER  
Charles J. Miller - (908)-469-6190

**Support Your Club and  
Get Something of Value  
at the Same Time**

## Advertising Rates

Full Page (7.5 x 9.0) \$45.00

Half Page \$25.00

Quarter Page \$18.00

*Discount Rates Available*

The Jersey Atari Computer Group Inc. (JACG) is an independent, informal organization of Atari computer users. It is not affiliated with Atari Corporation or any other commercial enterprise. Opinions expressed in this publication reflect only the views of the individual author, and do not necessarily the views of JACG. Material in this Newsletter may be reprinted by other Atari Users Groups, provided the author (if applicable) and the JACG are given credit. Only original work may be reprinted. Questions concerning reprinting should be addressed to the Editor.